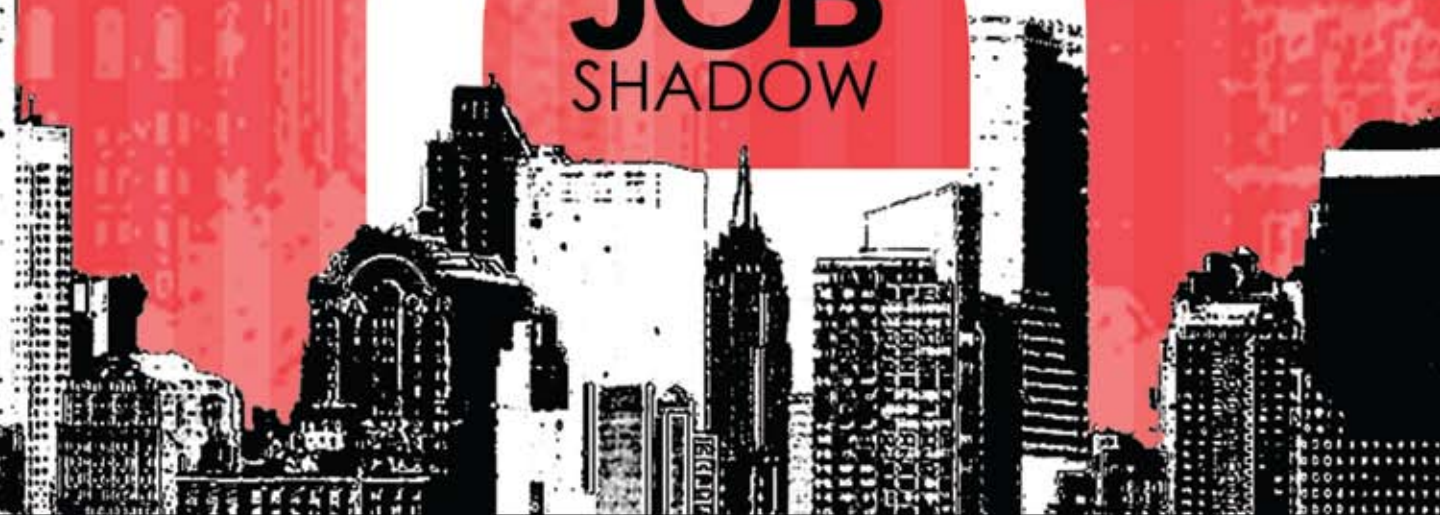




FEDERAL IT  
**JOB**  
SHADOW



TOOL KIT



## IT JOB SHADOW DAY TOOL KIT

Each year the Federal CIO Council sponsors an IT Job Shadow Day in collaboration with Junior Achievement and the Association for Federal Information Resources Management to provide high school students a day's view of the world of work. An IT Job Shadow Day Guide has been prepared by the Council to provide an overview of the event. To supplement the Guide, a Tool Kit has been prepared to ease the planning for agencies. The Kit contains materials and templates for agency use and adaptation. Both the IT Job Shadow Day Guide and Tool Kit can be used across agencies to help plan for the event.

### **The Kit includes:**

1. IT Job Shadow Day Orientation Slide Show\*
2. Checklist for Workplace Coordinator
3. Email Templates
  - A. Interagency Committee Announcement for IT Job Shadow Day
  - B. Welcome – Interagency Committee Chair to Workplace Coordinator
  - C. Workplace Coordinator to Solicit Hosts
  - D. Welcome - Workplace Coordinator to School Coordinator
  - E. Logistics - Workplace Coordinator to School Coordinator
4. Sample Press Release
5. The 8 Norms of the Net Generation
6. Sample Agendas
7. Certificate Template\*
8. Evaluation Forms
9. Resources for Students

### *Other resources available for planning:*

- Federal IT Job Shadow Day Guide - [www.cio.gov](http://www.cio.gov)
- Federal CIO Council Web Site - [www.cio.gov](http://www.cio.gov)
- Junior Achievement Job Shadow Day Home Page - [www.jobshadow.org](http://www.jobshadow.org)

Full documents are available in a downloadable Tool Kit folder on the Federal CIO Council website - [www.cio.gov](http://www.cio.gov).

\* Documents found exclusively in the downloadable Tool Kit folder

# WORKPLACE COORDINATOR'S

## LIST

### TEN TO SIX WEEKS PRIOR TO IT JOB SHADOW DAY

- \_\_\_ Kick-off meeting with Federal IT Job Shadow Day Committee (Orientation for workplace and school coordinators)
- \_\_\_ Review Shadow Day materials
- \_\_\_ Email and recruit employees/contractors who are interested in volunteering as hosts
- \_\_\_ Conduct Shadow Day orientation for hosts
- \_\_\_ Call the school coordinator to introduce yourself
- \_\_\_ Send out email to school coordinator
- \_\_\_ Reserve conference room for Shadow Day, lunch, and wrap-up activities
- \_\_\_ Take care of misc. logistics, etc.
- \_\_\_ Arrange for publicity of Shadow Day through workplace newsletter, emails, bulletin boards, etc.
- \_\_\_ Work with schools to determine if student transportation has been arranged; if students know the location of the agency; and where to meet workplace coordinator on the day of the event
- \_\_\_ Prepare Shadow Day agenda
- \_\_\_ Arrange for speakers
- \_\_\_ Follow-up with high schools who have not provided a list of students
- \_\_\_ Determine if any participants have special needs due to a disability
- \_\_\_ Make lunch arrangements and order food

### IT JOB SHADOW DAY

- \_\_\_ Notify hosts of their assigned students
- \_\_\_ Greet students at designated entrance
- \_\_\_ Conduct welcome session
- \_\_\_ Conduct lunch activities
- \_\_\_ Distribute Shadow Day bags to students
- \_\_\_ Ensure that students get to their transportation for departure
- \_\_\_ Collect evaluation forms from school coordinator, hosts, and students

### AFTER IT JOB SHADOW DAY

- \_\_\_ Follow-up meeting with school and workplace coordinators
- \_\_\_ Continue to cultivate relationships and opportunities for students at your agency

# EMAIL TEMPLATES FOR COORDINATORS



Editable templates can be found in the downloadable Tool Kit folder

## INTERAGENCY COMMITTEE ANNOUNCEMENT FOR IT JOB SHADOW DAY

The Federal Chief Information Officers Council in partnership with the Association for Federal Information Resources Management (AFFIRM) and Junior Achievement (JA), are planning an IT Job Shadow Day on [date]. The Council has coordinated this program in the past with much success, and looks forward to sponsoring this valuable program for high school students and the agencies.

IT Job Shadow Day is an academic activity designed to give students the unique opportunity to observe the federal IT work world. Students will learn about federal agencies and "shadow" IT professionals as they go through their work day. The program encourages students to pursue a career in the federal IT workforce.

We are asking for your support to ensure the success of IT Job Shadow Day and help in our efforts to recruit the next generation of rising stars to the IT Federal Government workforce. Please help us to provide a meaningful and interesting day for the students. In addition, your agency will benefit by initiating a talent pipeline by providing potential interns and future workers for your agency.

For those agencies who are interested in participating we ask that you appoint a workplace coordinator.

The coordinator will:

1. Participate in approximately two, Federal IT Job Shadow Day Committee meetings.
2. Coordinate with a school coordinator to plan the event.
3. Identify employees who will be hosts whom the student can shadow on the day of the event.

[Specify name of Chair for the event] Please provide the name of your workplace coordinator [specify name, email address, telephone number by specify date].

Thank you in advance for your interest and participation.

## WELCOME - INTERAGENCY COMMITTEE CHAIR TO WORKPLACE COORDINATOR

To: Workplace Coordinator

Subject: IT Job Shadow Day

Thank you for agreeing to be a workplace coordinator for the IT Job Shadow Day to be held on [specify date]. We have \_\_ high schools and \_\_ agencies who have committed to participating in the event. We are hoping that government organizations will host at least ten students on the day of the event.

An IT Job Shadow Day orientation will be held for workplace coordinators on [specify date, time and place]. For those of you who can not attend in person, the call in number is: [specify telephone number and pass code number.] For those of you who are calling in, the slide show, agenda and other materials will be sent to you prior to the orientation. The orientation will provide you with the necessary tools and guidance to ensure that IT Job Shadow Day is a success.

To further simplify planning for the event, we prepared an IT Job Shadow Day Guide, which is supplemented by a Tool Kit, which contains useful information and templates.

Please confirm with [specify name] no later then [specify date], if you can attend the orientation. Refreshments and beverages will be served. Thank you.

Co-Chair  
Federal CIO Council  
IT Workforce Committee

# EMAIL TEMPLATES FOR COORDINATORS



Editable templates can be found in the downloadable Tool Kit folder

## WORKPLACE COORDINATOR TO SOLICIT HOSTS

The Federal Chief Information Officers Council in partnership with Association for Federal Information Resources Management (AFFIRM) and Junior Achievement (JA), are planning an IT Job Shadow Day for high school students on *[specify date]*.

The IT Job Shadow Day is an academic activity designed to give students the unique opportunity to observe the federal IT work world. Students will learn about your agency and “shadow” IT professionals as they go through their work day. The program encourages students to pursue a career in the federal IT workforce. The theme of Shadow Day is “Moving IT Forward: The Next Generation.”

We are seeking volunteers to host students on the day of the event. You will assist in ensuring that the students have a meaningful and interesting experience at your agency. A host will be responsible for:

- Participating in a 1 hour orientation
- Committing to 6-8 hours on IT Job Shadow Day

If you would like to be a host, you must first seek the approval of your supervisor. Volunteers will receive the necessary training and guidance to ensure a successful event. To register or obtain additional information, contact *[name of workplace coordinator, telephone number and email address]*.

We are hoping that IT Job Shadow Day will be the beginning of ongoing relationships with the students and the high schools. We are asking for your support to ensure the success of IT Job Shadow Day, and help in our efforts to recruit individuals to the IT Federal Government workforce.

## WELCOME - WORKPLACE COORDINATOR TO SCHOOL COORDINATOR

Good Afternoon,

Thank you for your interest in participating in the Federal IT Job Shadow Day. *[specify agency/organization name]* is looking forward to hosting *[specify number of student agency will host]* students from *[specify high school name]* on Thursday, February *[specify date]*. *[Specify if students must be U.S. citizens.]* As your point of contact, I will be leading and coordinating the event.

Below is a list of required actions that will help to arrange your visit.

- Send a list of student names and grades levels by *[specify date]*
- Prepare students for work site visit (e.g., dress code, conduct of standards, etc.)
- Collect parent/custodian consent forms
- Arrange transportation for the students
- Remind students to bring proper identification to the work site visit (i.e., Government issued identification card, Student ID, Passport)
- Identify any special food requirements/special assistance needed due to any disabilities

We look forward to working with you and welcome any input you may have to ensure a successful event. Please let me know if you have any questions.

*[Specify workplace coordinator name]*

*[Specify telephone number]*

*[Specify email address]*



# EMAIL TEMPLATES FOR COORDINATORS



Editable templates can be found in the downloadable Tool Kit folder

## LOGISTICS - WORKPLACE COORDINATOR TO SCHOOL COORDINATOR

Dear [specify school coordinator name],

We look forward to welcoming you and your students/chaperones to IT Job Shadow Day. [specify agency] on [specify date] at the Pentagon. If we must cancel due to snow, our event will be rescheduled for [specify date]. Please find attached an agenda for the day. To assist in making the day go smoothly, please review the following instructions.

1. Students should arrive 10-15 minutes before the scheduled meeting time to allow time to pass through building security. Students will need to be escorted throughout the day.
2. Students should report to the Visitor's Entrance above the Pentagon Metro stop. A Host will meet the students at the Visitor's Entrance and help process them through security.
3. Prior to the event, please let us know if any visitors have special needs due to any disabilities or dietary restrictions.

### Contact Information

[Specify workplace coordinator's name, email address and telephone number.]

The information below must be provided by students/chaperones to [specify name] no later than [specify date] so the information can be provided to the security office prior to the event.

Everyone will be required to have a photo ID. The Pentagon and National Military Command Center (NMCC) will accept a student ID, driver's license or other government-issued ID. Proper identification must be shown to building security:

1. Ages 13 to 17 - Require 1 form of photo ID or a parent/guardian to vouch for them
2. Ages 18 and up - Require 2 forms of ID (one form must be a photo ID, the other may be social security card, birth certificate, any club card, anything with the individual's name on it [excluding business cards])

The following information is required to take a tour of the NMCC:

Name (Last, First MI)  
SSN  
Date of Birth  
Place of Birth (City, State)  
Citizenship

[Note for workplace coordinators: Personal information such as SSN, Date of Birth and Place of Birth should only be requested if required for security purposes. If any personal information is requested a Privacy Act Statement should be provided specifying why the information is being requested. Any further questions or concerns should be addressed to your Privacy Officer.]

### PRIVACY ACT STATEMENT

AUTHORITY: Title 10, U.S. Code, Chapter 5, Section 151-155, and E.O. 9397 PRINCIPAL PURPOSE: To maintain a record of non-Joint Staff assigned persons having access to the Joint Staff Restricted Area.  
ROUTINE USES: None.  
DISCLOSURE: Failure to disclose requested data could result in denial of access to Joint Staff Restricted Area.

### Dress Code

Dress code is business professional. Students should wear comfortable shoes since we will be walking throughout the Pentagon on hard surfaces.

### Breakfast and Lunch

Breakfast will be provided. Bottled water and a snack will be in the student's IT Job Shadow bag. Lunch will be provided.

### Transportation and Parking

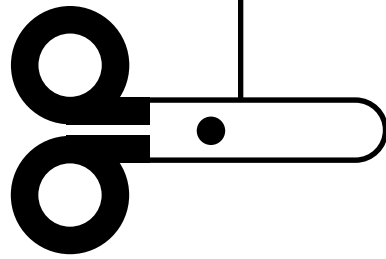
[Specify public transportation and parking information.]

### Security

All purses carried into the Pentagon are subject to search. The following items are prohibited:  
1. Weapons of any sorts, such as knives, box cutter, mace, pepper spray, etc.  
2. Bags, knapsacks, camera bags, backpacks, and shopping bags.

The following are not prohibited, but highly discouraged:  
Anything with batteries, for example, picture cameras, video cameras, PDAs, blackberries, laptops, etc.  
Cell phones are allowed, but should be turned off during meetings and will have to be locked up during visits to secure areas.

# PRESS



# RELEASE



**U.S. Department of Defense**  
Office of the Assistant Secretary of Defense (Public Affairs)  
Press Advisories

On the Web:  
<http://www.defenselink.mil/advisories/advisory.aspx?advisoryid=2945>  
Media contact: +1 (703) 697-5131/697-5132

Public contact:  
<http://www.defenselink.mil/faq/comment.html>  
or +1 (703) 428-0711 +1

**No. 010-08**

**February 05, 2008**

## **DoD to Host High School Students for Federal Information Technology Job Shadow Day**

The Department of Defense will host more than 60 Washington D.C. metropolitan area high school students on Feb. 7 in support of the Federal CIO Council's Information Technology (IT) Job Shadow Day. The day-long event is co-sponsored by the Association for Federal Information Resources Management and Junior Achievement.

Divided into small groups, the students will spend the day with one of several DoD components and agencies in the National Capitol Region. Participating DoD organizations include the Office of the DoD Chief Information Officer, the National Geospatial-Intelligence Agency, Department of the Air Force, Department of the Army, National Defense University's Information Resources Management College, the Defense Finance and Accounting Service and DoD Washington Headquarters Services.

"IT Job Shadow Day is an academic activity designed to give students a unique opportunity to observe the federal IT work world and learn about Federal agencies," said Joyce France, DoD CIO Management Services Director. "DoD is proud to support the Federal CIO Council's IT Job Shadow Day and highlight the exciting and important opportunities that exist within the department's team of IT professionals."

According to Federal CIO Council officials, 33 high schools and 39 federal agencies have signed up to participate in this year's IT Job Shadow Day.

# THE 8 NORMS OF THE NET GENERATION

"New Paradigm identified certain normative attitudes and behaviors endemic to Net-Geners [born between 1977 and 1997], which differentiate them from previous generations. These norms have become the part of the vernacular of marketing." Reviewing the characteristics of the Net Generation may also be applicable in planning an IT Job Shadow Day for high school students. These characteristics are described below:

**FREEDOM** - To a Net Gener, choice is like oxygen. With the proliferation of media, sales channels, product types, and brands, Net Gener leverage technology to cut through the clutter and find the products that fit their needs. They expect to choose where and when they work; to be able to use technology to escape traditional office space and hours; and to integrate their home and social lives.

**CUSTOMIZATION** - Net Gener have grown up using media they can customize. With their own blogs and web sites, personalized cell phones, TiVo, Slingbox, podcasts, they get the media and information they want, when and where they want it, and alter it to fit their unique needs and desires. They want to be able to customize their workplace—doing things like helping improve their work processes and having input into their own job description.

**SCRUTINIZERS** - They are the new scrutinizers. Older generations marvel at the consumer research available on the Internet; Net Gener expect it, and as they grow older, their online engagement increases. Net Gener know that their market power allows them to demand more of companies.

**INTEGRITY** - When deciding what to buy and where to work, they look for corporate integrity and openness. Whether they are exposing a flawed viral marketing campaign or researching a future employer, Net Gener make sure a company's values align with their own values.

**COLLABORATION** - Unlike their TV generation parents, Net Gener interact with media and with others through media. They collaborate online in chat groups, play multi-user video games, use email and share files for school, work, or just for fun. They influence each other through "N-fluence Networks," where among other things, they discuss brands, companies, products and services. Marketers must recognize that there is more to the consumer relationship than brand recognition. Having grown up being authorities on something important, they have a different view of authority in the workplace.

**ENTERTAINMENT** - Net Gener want their work, education, and social life to be fun and entertaining. They bring a playful attitude to work—they know that there's always more than one way to achieve a goal, just like in the latest video game. They seek entertaining experiences in products and services. Workplaces must be fun—as work, learning, collaboration and entertainment are for the first time inseparable.

**SPEED** - Net Gener need speed—and not just in video games. In a world where information flows rapidly among vast networks of people, communication with friends, colleagues, and bosses takes place faster than ever. Marketers and employers should realize that Net Gener expect the same quick communication in return—every instant message should draw an instant response. Net Gener are speeding up the metabolism of business—for the good.

**INNOVATION** - For Net Gener, digital tools have encouraged and facilitated innovation in all aspects of their lives. Marketers reach them in increasingly creative ways, while Net Gen business leaders have literally changed entire industries. Their need to innovate challenges established norms, some of which will need to be adapted, and some to which Net Gener will need to adapt.

"Meet the Net Generation", Don Tapscott, nGenera Insight Syndicated Research Study, 2006.



# AGENDA TEMPLATES FOR COORDINATORS

Editable templates can be found in  
the downloadable Tool Kit folder

## SAMPLE AGENDA

Department of Agriculture  
Office of the Chief Information Officer (OCIO)  
IT Job Shadow Day  
[Specify date]

8:00 – 8:15	Students arrive to be processed through security – Visitor’s Entrance/Metro Entrance
8:15 – 8:30	Introductions Review agenda and administrative details/logistics
8:30 – 8:55	Overview Deputy CIO, ITM Tour of USDA visitor center
9:00 – 9:20	Welcome
9:25-11:30	One-on-One with an IT Professionals E-Government HSPD-12 – Credential Processing Center IT Services Geospatial Systems/Operations Centers
11:30 – 12:15	Lunch – USDA Cafeteria – South Building
12:30 – 1:30	Security Issues (Cybersecurity) Transforming your current security issues into an IT career Information Assurance Scholarship Program
1:30 – 2:00	Goals and Aspirations Opportunities for Internships and Positions at USDA
2:00 - 2:30	Closure – Ice Cream Shop in Promenade Student Briefing - Review the day Evaluations Distribute take-home items
2:30	Adjourn

Breaks will be given at appropriate times between agenda items.

## SAMPLE AGENDA

NASA Goddard Space Flight Center  
IT Job Shadow Day  
[Specify date]

8:15 – 8:30	Meet Students at Security Office
8:30 – 9:00	Welcome Deputy Director, IT and Communications  Director, Education Programs Office  Introductions and Review of Day’s Agenda Education Specialist  NASA Goddard IT Overview Chief, IT Program Management Office
9:30 – 10:15	GSFC Visualization Lab Visualization Project Manager
10:15 – 10:30	Break
10:30 – 11:00	GSFC Network Capability Network Projects Leader
11:00 – 11:30	TV Operations Head, TV Operations
11:30 – 12:30	Lunch and HR Activities
12:30 – 1:00	Super Computer Chief, Computational & Informational Sciences Technology Office
1:00 – 1:15	Travel to Mission Operations
1:15 – 2:00	Mission Operations Mission Operations Manager
2:00 – 2:15	Wrap-up & Evaluations

# EVALUATION TEMPLATES FOR PARTICIPANTS

Editable templates can be found in the downloadable Tool Kit folder

## STUDENT EVALUATION FORM

Thank you for participating in IT Job Shadow Day! Please complete this evaluation and return it to [specify person]. Your input will be used to strengthen the Job Shadow program.

Please rate the following on a scale of 1 through 5 (1 indicates that you strongly agree with the statement, 5 indicates that you strongly disagree).

Overall I would grade the IT Job Shadow experience:

A \_\_\_\_ B \_\_\_\_ C \_\_\_\_ D \_\_\_\_ F \_\_\_\_

Through my Job Shadow experience I was able to see a connection between what I learn in school and how it can be used at work. 1 2 3 4 5

The experience was helpful in providing additional ideas for careers. 1 2 3 4 5

Job Shadowing helped me to identify skills that I have learned in school that I will use in my future career. 1 2 3 4 5

Job Shadowing helped me to identify skills and experiences that I need to develop to get a good job. 1 2 3 4 5

I was able to observe first hand the connections between education and a good salary during my Job Shadow experience. 1 2 3 4 5

I believe my shadow was well prepared for my visit. 1 2 3 4 5

I believe the pre and post activities added to my job shadowing experience. 1 2 3 4 5

I would like to participate in Job Shadowing again in the future. 1 2 3 4 5

What did you like the best about the Job Shadow experience?

What did you like least about the Job Shadow experience?

## SCHOOL COORDINATOR EVALUATION FORM

Thank you for participating in IT Job Shadow Day! Please complete this evaluation and return it to [specify person]. Your input will be used to strengthen the Job Shadow program.

Please rate the following on a scale of 1 through 5 (1 indicates that you strongly agree with the statement, 5 indicates that you strongly disagree).

Materials were of good quality. 1 2 3 4 5

The materials provided were useful and added value to the experience. 1 2 3 4 5

The process of setting up a job shadow opportunity for students was easy. 1 2 3 4 5

The time spent preparing for Job Shadow Day was worth the experience. 1 2 3 4 5

Students were engaged. 1 2 3 4 5

The program demonstrates the link between skills learned in school, and how they are used in the workplace. 1 2 3 4 5

The job shadow experience has increased students awareness of their options. 1 2 3 4 5

Students gained a new perspective of their academics; they saw how academics are important to their future careers. 1 2 3 4 5

I would like to participate in Job Shadow Day again with future students. 1 2 3 4 5

I would recommend job shadowing to other school personnel. 1 2 3 4 5

What did you like the best about the Job Shadow experience?

What did you like the least about the Job Shadow experience?

What activities would you like to see for future events?

# RESOURCES FOR STUDENTS

## WHAT I LEARNED ABOUT THE IT FIELD

*While you participate in the various activities on IT Job Shadow Day, listen to speakers and interact with people you meet, try to learn something about some of the following topics:*

1. Chief Information Officer (CIO): What is a CIO? What does a CIO do? Is a Government CIO the same as a Corporate CIO?
2. Information Sharing: People, processes, and technology working together to enable collaboration and timely sharing of information. What are the challenges at DoD?
3. Information Assurance: Protect information and defend systems and networks to assure information, information systems, and information technology infrastructure.
4. Privacy of Information: What kinds of privacy concerns or disclosures have you heard about in the news? How might privacy concerns impact how the DoD shares or protects personal information (i.e., payroll administration, electronic medical records)?

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5. IT Workforce Management: Focuses on recruitment, training/education, and retention of IT Professionals. Recruiting Tool Kit includes the Information Assurance Scholarship Program (IASP). Think about the type of working environment you may look for in the future.

6. Expanded E-Government (E-Gov): Expanding E-Gov is the President's goal of utilizing technology to improve how the Federal Government serves you, citizens, businesses and agencies alike ([www.whitehouse.gov/omb/egov](http://www.whitehouse.gov/omb/egov)). Throughout your day, listen to discussions of ways DoD may be using technology to improve its processes.

7. Section 508: Requirement to provide accommodation and/or Assistive Technology (AT) to ensure information on Electronic Information Technology (EIT) (i.e. web sites, television, or telephone) is accessible by individuals with disabilities.

8. Other information you found of interest:

# RESOURCES FOR STUDENTS

Editable templates can be found in  
the downloadable Tool Kit folder



## THE FEDERAL GOVERNMENT AS EMPLOYER OF CHOICE

The IT Job Shadow Day provides students with hands-on-experiences and encourages them to pursue government careers. This experience gives participating high school students insight into a day in the life of federal IT professionals. Participating federal agencies have an opportunity to share with students why the Federal Government should be their employer of choice. The following excerpts from the Partnership for Public Service provided the "Top Ten Reasons to Choose a Federal Job," and these are valuable points to share with the students:

1. Due to pending retirements, there will be many job opportunities in the Federal Government.
2. Federal employees perform work that impacts on the lives of others.
3. There are variety of federal jobs suited to every interest and skill.
4. The Federal Government has a pay back program that can provide employees up to \$10,000 per year to help pay-off student loans. Additionally, some financial assistance may be available for employees to pursue a graduate degree.
5. Federal agencies offer excellent training and development opportunities.
6. There are federal jobs around the country and the World.
7. The Federal Government serves as a model to the private sector in achieving workforce diversity.
8. Government salaries are competitive for most professions.
9. Federal agencies offer a variety of flexible work schedules and benefits to encourage work-life balance including teleworking, job-sharing and on-site child care centers. Federal benefits, including health insurance, retirement and vacation are extremely competitive with the private sector. Agencies offer transit subsidies for employees to use mass transit to commute.
10. The Federal Government believes in helping employees advance their career by developing highly marketable skills.

Source: Adapted from "Where the Jobs are: Mission Critical Opportunities for America," pg. 107, Appendix III, 2007, Partnership for Public Service, Washington, DC.

# RESOURCES FOR STUDENTS

## TYPES OF IT JOBS IN THE FEDERAL GOVERNMENT

### 2210-Information Technology Specialist

Develops, delivers, and supports information technology (IT) systems and services. This occupation covers only those positions for which the paramount requirement is knowledge of IT principles, concepts, and methods; e.g., data storage, software applications, networking. Information technology refers to systems and services used in the automated acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, assurance, or reception of information. IT includes computers, network components, peripheral equipment, software, firmware, services, and related resources.

**Applications Software** – Design, document, develop, modify, test, install, implement, and support new or existing applications software.

**Customer Support** – Plan and deliver customer support services, including installation, configuration, troubleshooting, customer assistance, and/or training in response to customer requirements.

**Data Management** – Plan, develop, implement, and administer systems for the acquisition, storage, and retrieval of data.

**Enterprise Architecture** – Plan, design, implement, document, assess, and manage enterprise structural framework to align IT strategy, plans, and systems with the mission, goals, structure, and processes of the organization.

**Internet** – Plan, design, develop, test, implement, and manage Internet, intranet, and extranet activities, including systems/applications development and technical management of web sites. Includes only positions requiring application of technical knowledge of Internet systems, services, and technologies.

**Network Services** – Plan, analyze, design, develop, test, configure, install, implement, integrate, maintain, and/or manage network systems used for the transmission of information in voice, data, and/or video formats.

**Operating Systems** – Plan, install, configure, test, implement, and manage the systems environment in support of the organization's IT architecture and business needs.

**Policy and Planning** – A wide range of IT management activities that typically extend and apply to an entire organization or major components of an organization. This includes strategic planning, capital planning and investment control, workforce planning, policy and standards development, resource management, knowledge management, architecture and infrastructure planning and management, auditing, and



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information security management.

**IT Project Management** - Manage information technology projects to provide a service, product, or system.

**Security** - Assure the confidentiality, integrity, and availability of systems, networks, and data through the planning, analysis, development, implementation, maintenance, and enhancement of information systems security programs, policies, procedures, and tools.

**Systems Administration** – Plan, and coordinate the installation, testing, operation, troubleshooting, and maintenance of hardware and software systems.

**Systems Analysis** – Apply analytical processes to the planning, design and implementation of new and improved information systems to meet the business requirements of customer organizations.

# RESOURCES FOR STUDENTS

## INFORMATION TECHNOLOGY VOCABULARY STUDY GUIDE

**Application:** The use of a technology, system, or product.

**Bit:** The smallest unit of digital information ('Bit' is a contraction of 'binary' and 'digit'). A binary digit has a value of 0 or 1.

**Boot:** To load the operating system from disk.

**Buffer:** A temporary storage area for data being transferred from one place in the computer system to another.

**Byte:** The fundamental storage unit of computers and is composed of 8 bits (binary digits) and stores the equivalent of one character or letter.

**Cache:** A temporary storage area for frequently used information, located in RAM or on the hard disc. Using cache speeds up system response by reducing the time it takes to locate requested information.

**CD Drive:** The physical components necessary to read data from a CD-ROM.

**CD-ROM:** (Compact Disc, Read-Only Memory), Data is stored as grooves on a disc surface, which are read by a laser in the CD-ROM drive. The data can be read and copied; data cannot be erased; new data cannot be added. Computer manual instructions which come with computer hardware and software that give important and useful information you should know; often printed, increasingly included in electronic form.

**Cookie:** A cookie is a way for a place you visit on the World Wide Web site to remember that you've visited the site and possibly to retain some information about you.

**Copyright:** The legal and intellectual right of a person or company to retain control of an original work.

**CPU:** (Central Processing Unit), the main processing component of the computer.

**Database:** A collection of related information about a subject, organized in a useful manner that allows the user to retrieve information in specific ways to assist in decision making or production of documents; common database uses are address books, census information, library catalogs; databases were used long before computers in the form of card indexes etc. but computers make them more efficient.

**Desktop:** A desktop is a computer display area that represents the kinds of objects one might find on a real desktop.

**Digital:** A form of representation in which distinct objects (digits) are used to stand for something in the real world.

**DOS:** (Disk Operating System), the program supplied by the vendor which interacts with the processor and storage media.

**Downloading:** The transmission of a file from one computer system to another, usually a smaller computer system. From the Internet user's point-of-view, to download a file is to request it from another computer (or from a Web page on another computer) and to receive it.

**Email:** The use of a network to send and receive messages.

**Format:** To prepare a diskette or hard disk to accept data for a certain computer.



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**GigaByte:** 1 GB = 1,073,741,824 bytes

**Hard Drive:** A permanent storage medium for computer data based on a rotating disc with a magnetically sensitive layer. Information can be written on this and read again using a read/write head. Information can also be deleted.

**Hardware:** The manufactured parts of a computer system as opposed to programs or software.

**HTML:** (Hyper Text Markup Language), the set of "markup" symbols or codes inserted in a file intended for display on a Web browser. The markup tells the Web browser how to display the information for the user.

**IT:** Information Technology

**KiloByte:** One KB = 1024 bytes

**MegaByte:** One MB = 1024 x 1024 bytes (actually 1,048,576)

**MegaHertz:** One megahertz is a million cycles of electromagnetic currency alternation per second and is used as a unit of measure for the "clock speed" of computer microprocessors (CPU).

**Network:** A communication and exchange system, created by linking two or more computers.

**PBGC:** Pension Benefit Guaranty Corporation

**PC:** Personal computer

**RAM:** (Random Access Memory), the "built-in" readable and writeable data storage that comes with (or can be added to) a computer.

**Remote:** A device or computer system that is situated at a distance from a central computer and that can be accessed via a network.

**ROM:** (Read-Only Memory), the "built-in" computer memory containing data that normally can only be read, not written to.

**Server:** A program or computer that provides some service to other programs or computers.

**Software:** Computer programs used to perform specific tasks. User software is those routines written by a user which are referred to the operating system.

**Telecommunication:** Sending and receiving information by means of the telephone system; includes both electronic and voice.

**Troubleshooting:** The act or process of identifying and eliminating problems or faults, especially in electronic or computer equipment.

**Uploading:** Is transmission in the other direction: from one, usually smaller computer to another computer.

**URL:** (Uniform Resource Locator), a name for a web page address.

**Virtual:** Temporarily simulated or extended by computer software.

**Virtualization:** A technique for hiding the physical characteristics of computing resources from the way in which other systems interact with those resources.



# RESOURCES FOR STUDENTS

## WRITING YOUR RESUME

*What is a resume, and how does it relate to finding a job or work experience?*

- A resume is a written summary of your knowledge, skills, abilities and educational experience.
- It is the first critical step taken in acquiring a job, and is a critical tool used by a potential employer to evaluate and make decisions on whether or not an applicant will be value-added to the hiring organization.

## PREPARING A RESUME

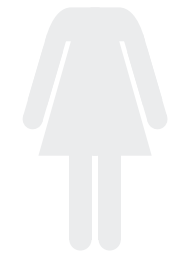
*Gather, summarize and present your achievements under the following essential headings:*

- Personal/Contact Information: Your name, full mailing address, phone number(s) and email address.
- Objective: Briefly state (preferably in one sentence) your work objective. Your work objective informs your prospective employer not only about the type of work you are seeking, but also provides insights on the type of person you are and your potential for working with others and fitting into the work environment of the organization.
- Education: List your most recent educational information first: degree, major, academic institution, academic major(s) and/or minor(s), Grade Point Average (GPA, if higher than a 3.0) and academic honors.
- Work Experience: List your most recent work experience first, and include the following for each work experience: Position title; name of the organization; job location; dates of employment; work functions and responsibilities – with emphasis on those specific skills and achievements that are aligned with the work knowledge and skills that the organization is seeking to fill their vacant positions.

*Other Information:*

- Other knowledge, skills and abilities that provide more information on other impressive endeavors you have pursued such as specialized training and certifications.
- Leadership Experience: any activity or function which depicts your leadership knowledge, skills or experience.
- Community involvement/volunteer activities: these types of activities provide more information to your prospective employer on your values and concern for others beyond your immediate family and friends.
- Hobbies and Interests: This type of information depicts you as a unique person as opposed to another applicant looking for a job.

Editable templates can be found in the downloadable Tool Kit folder



*Your resume depicts your written communication skills and your hiring potential:*

- Write clearly and be precise in your statements. Remember, most resumes are reviewed in 30 seconds, so you need to “sell yourself” effectively with an “economy of words” – hence, the need to choose your words wisely. Your resume should be 1 – 2 pages in length.
- Use actions words and bullets with short sentences to depict a positive attitude in your work history achievements and towards meeting future work challenges. Remember, your resume must gain the prospective employer’s attention and interest if you are to be considered for the job.

*Align/Adjust Your Resume to the Targeted Job:*

- Learn about the company to which you are applying for a job. This information will help you to identify what knowledge, strengths and experience you need to include and emphasize in your resume.

*Typos, Grammatical Errors:*

- Typos or grammatical errors are common mistakes found in resumes, but you should not use this as an excuse for having these types of errors in your submitted resume; remember, a carefully prepared resume that is error-free gives your prospective employer an idea of the quality of your written work. Take the time, therefore, to identify and correct all typos and grammatical errors.

*Solicit advice/guidance on your resume preparation:*

- Ask someone who you respect to review your resume; encourage your reviewer to ask questions and provide suggestions on improving your resume; and make resume revisions based on these questions and suggestions. An insightful reviewer will also help you to identify typos and grammatical errors; correct lengthy sentences that can be stated more precisely; identify and list achievements that are important to the prospective employer; improve on your resume design; and make other improvements that you may have overlooked in your resume preparation.

# RESOURCES FOR STUDENTS

## HUMAN RESOURCE GUIDE FOR STUDENTS:

Information Technology Careers in the Federal Government

### Student Employment Opportunities

Use these web sites to find the right program for you!

- Search Student Jobs – [www.studentjobs.gov](http://www.studentjobs.gov)
- Junior Achievement Student Center – <http://studentcenter.ja.org>
- Student Educational Employment – [www.opm.gov/employ/students](http://www.opm.gov/employ/students)
- Summer Employment – [www.usajobs.opm.gov/ei19.asp](http://www.usajobs.opm.gov/ei19.asp)
- e-Scholar – [www.studentjobs.gov/e-scholar.asp](http://www.studentjobs.gov/e-scholar.asp)

### Application Resources

These resources will help in developing your resume, identifying Knowledge Skills and Abilities (KSA), and learning about interviewing tips!

- Create a Resume – [www.studentjobs.gov](http://www.studentjobs.gov)
- Resume and KSA Tips – [www.usajobs.opm.gov/infocenter/resumetips.asp#tips](http://www.usajobs.opm.gov/infocenter/resumetips.asp#tips)
- Interviewing Tips – [www.usajobs.opm.gov/infocenter/interviewtips.asp](http://www.usajobs.opm.gov/infocenter/interviewtips.asp)

### Scholarship Information

Review scholarships available to you:

- Information Assurance Scholarship Program – [www.defenselink.mil/cio-nii.iasp](http://www.defenselink.mil/cio-nii.iasp)
- Scholarship for Service – [www.sfs.opm.gov](http://www.sfs.opm.gov)
- Science, Mathematics, and Research for Transformation (SMART) Scholarship Program - [www.asee.org/smart](http://www.asee.org/smart)
- Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM)
- National Science Foundation – [www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=5257&org=DUE&from=home](http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5257&org=DUE&from=home)

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## PENTAGON TRIVIAL PURSUIT

1. When did construction of the Pentagon begin? September 11, 1941
2. The construction of the Pentagon was completed on January 15, 1943.
3. What was the total building cost to construct the Pentagon? \$49,600,000
4. How many acres is the land area of the Pentagon? 583
5. What is the total length of the corridors at the Pentagon? 17.5 miles
6. What shape is the Pentagon? Pentagon
7. The new Air Force Memorial features three stainless steel spires. What do these spires represent?

The three spires impart a sense of accomplishment in command of the sky, and evoke the image of the precision “bomb burst” maneuver performed by the U. S. Air Force Thunderbird Demonstration Team. The three spires also represent the three core values of the Air Force – integrity first, service before self, and excellence in all that is done. They represent the Air Force’s total force-active, guard, and reserve.

8. How many feet is the highest spire? 402 sq ft.
9. What is the total floor space square feet of the Pentagon? 6.5 million sq ft.

In the Pentagon, how many:

- |                       |        |
|-----------------------|--------|
| • stairways?          | 131    |
| • restrooms?          | 284    |
| • light fixtures?     | 16,250 |
| • escalators?         | 19     |
| • drinking fountains? | 691    |
| • clocks installed?   | 4,200  |



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